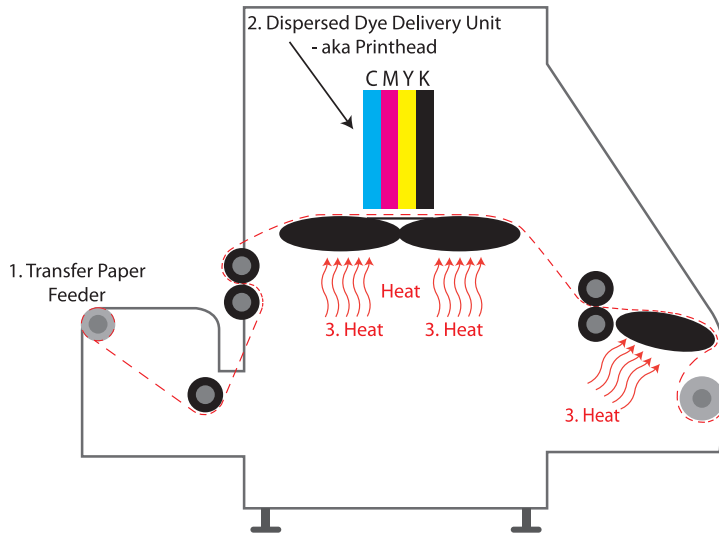
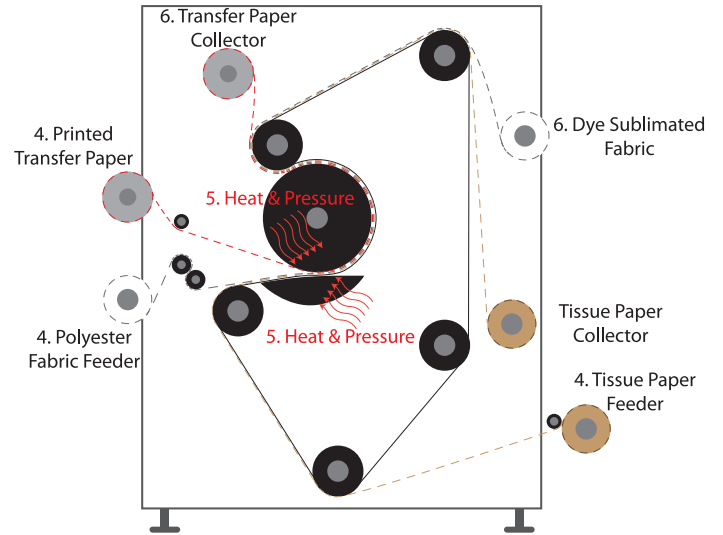


DYE SUBLIMATION PROCESS

DYE SUBLIMATION PRINTER



DYE SUBLIMATION TRANSFER PRESS



WHAT IS DYE SUBLIMATION?

Dye sublimation is a printing technology which dyes 100% polyester fabric by transforming the inks into a heat-activated gas which bonds with the fibers. This results in a brilliant finish with a wide photographic gamut. The actual process involves printing a digital file on special paper using large format printers and then heat-pressing the images using a large format heat press, thereby infusing them into the fabric.

STEPS

1. Transfer paper is fed into printing press.
2. Dispersed dyes are printed on the transfer paper.
3. Low temperature heat dries the ink on the transfer paper, which is then put on a roll and placed on the transfer press.
4. Printed transfer paper and polyester fabric are fed into the press. Tissue paper is fed into the machine to protect the belt.
5. Heat and pressure are applied causing the dyes to transform into vapor and infuse into the fabric.
6. The dye sublimated fabric is put on a roll and used transfer paper is collected on a waste roll.

DYE SUBLIMATION INKS

Printed on a special transfer paper, dye sub inks, also called “dispersed dyes,” turn into a gas when heated to around 425 degrees. Through heat and pressure, the ink forms a bond with the fibers and dyes the fabric. At this point the product is foldable, washable, and ready to be finished.

WHY DYE SUB?

- » Truly continuous tones can be achieved equivalent to photographs without the use of halftone printing.
- » The prints are dry and ready to handle as soon as they exit the transfer press.
- » Colors are extraordinarily brilliant because the dye is bonded to the fibers of the fabric.
- » Images are permanent and do not peel or fade.
- » The finished product results in material that is easy to handle, washable, and reusable. It is also lightweight and easily foldable, making it cost-effective to transport.
- » Unlike dye sub, direct print fabric wrinkles easily and has a crunchy feeling even before printing.